

Mantua Model Group

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MISSISSIPP 1870

Novità assoluta IL FASCIAME IN BALSA DURO. (Vedi pag. 2)

New procedure.

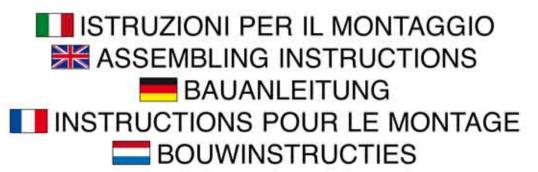
THE PLANKING IN HARD BALSA. (see page 8)

Absolute Neuheit DIE VERKLEIDUNG BESTEHT AUS HARTEM BALSAHOLZ. (sehen seite 12)

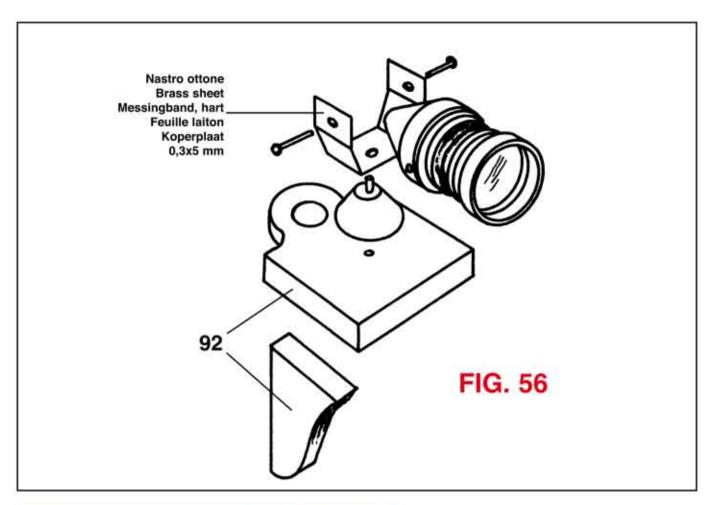
> Nouveauté absolue LE BORDÉ EN BALSA JE DURE. (voir page 19)

Absolute nieuwigheid BEPLANKING IN HARD BALSAHOUT. (zie page 24)

Art. 734



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WHAT YOU MUST KNOW

The first step before starting the assembly of a ship model, is to learn as much as possible about the model, reading all literature, the plan and the instructions.

The perfect know ledge of model construction will come in advance if you read the instruction book and if you examine with care the plans and all the sketches and the pictures following the numbers.

Too much hast in the building, can cause mistakes and a loss of time and money.

The MISSISSIPPI instruction book has been written by a group of expert modellers after one year of hard work, assembling the prototype, selecting the step by step construction, making this a pleasure for the expert as well as easy for the beginner.

Experts will know the benefit of reading the procedure before building and we recommend that beginners do the same.

When we are sure that we understand every step, we have to check our tool assortment and necessary materials. If we have the kit, we have plenty of wooden and metal components and we need tools only.

We describe the most important hand tools, but if the builder has more sophisticated help, the work will be easier.

Nothing can substitute having the proper tools.

The first basic tool is the fretsaw with its table and a number of right blades, different thicknesses both for metal and wood.

When you use a fretsaw, never cut on the printed line, but leave a little extra wood, to remove with sandpaper or proper file.

The finishing of the slots must be done with a file to be sure of the perpendicularity of the parts and no play in the joints.

Different thickness of the wood require different blades for nice cutting and no damage to the fine edges and corners.

N. 0 and 1, the thinner blades, are used for max. tickness of 1,5 mm. wood, medium sizes as N. 3, 4 or 5 are to be used on hard and thick plywood.

The new technology of the laser cut has reduced a lot the use of the fretsaw for all the kits of the Mantua Model Group.

An electric fretsaw will save handwork. A second necessary tool is the electric drill, small size, 12 volt operating, perfect for drilling small holes and for finishing parts with different profile cutters.

The assortment of special tools for the drill is made with shell bits from 0,5 to 3 mm., different profile cutters, sandpaper holder etc. Wider holes will be cut with a hand drill or with a round file.

A pair of tweezers, small and medium size if possible, will help to handle the small parts and to make the small knots on the riggings. Round-nosed pliers will be used to bend metal wires and profiles, cutting nippers will cut rope exactly and brass wires.

For wood cutting and modelling, a number of balsa knifes with different blades will make life easier and help in producing good work.

Important tools are soft files, large or needle type, with different profiles: flat, round, half round, square, triangular etc.

The finishing of the wooden surface is done with sand and emery-paper, coarse, medium and fine grain: 80, 120, 240.

The paper is used by hand or glued on a flat plywood surface like a file.

The beginner cannot forget the planking machine; a tool very usefull to bend the plank edges and the strip clamp to cut the strips following the bilge line.

For cutting photo-etched brass sheets and thin plywood it is necessary that a pair of strong scissors as an electrician might use are obtained.

To clamp parts it is necessary that an assortment of pins, small nails and staples and of course a hammer are used.

The glue: we use two types of cement for all the work, a white quick resin and instant glue or cynoacrylate resin; use small drops of cement at all times for the best result. Good calipers will help checking the dimensions of the parts.

For finishing, cleaning, varnishing and painting, we need a number of brushes, small, N. 0 or 1, and medium size N. 4 or 5.

Any type of hobby dope is suitable for the finishing, nitro or acrylic.

To bend the planking strips the planking machine Nr. 8150 is a very important tool as well as the strip clamp, Nr. 8155 necessary for a correct strip tapering & to support the hull during the upper & side works.

We also produce the wood lathe (Nr. 8160) 12 volt operating, as for mast, yard & spar tapering, as well as for producing your own fittings.

Two words on the work place: the place is not important in its self, a specialized hobby corner or a kitchen table, but everything must be in good order because it is very easy to lose small parts, which are time consuming and costly to replace.

Also utilise sun light for modelling during the day and in the evening we must select the correct electric lamp to check all the smallest details without problems.

While working we must select the necessary parts and tools to avoid confusion and leaving out of the way what is not necessary or finished.

For this reason we have recommended you read the instructions with care and to proceed step by step.

Now the work is in your hands, we thank you for choosing Sergal Model kits and we wish you many hours of pleasure and an excellent final result.

SERGAL

ASSEMBLING INSTRUCTIONS

Number each Laser cut part before removing from plywood, following the plan (Sheets N. 1-2-3-4). Use a thin balsa knife to cut off the parts, see drawing N. 1 on the Sheet N. 1. Do not remove all parts, but step by step only the pieces you need, to avoid confusion with other parts. Clamp the keel N. 11 into the assembling support (optional tool N. 8155) & fit all the parts with no glue following the Sketch N. 2, Sheet N. 5, hull structure. Check the amount of material to remove from the frames N. 1-2-3, & from the plank supports N. 16 with a 1,5x6 mm planking strip, see Fig. 3.

Disassemble the parts & assemble again with P.V.A. glue (Art. 1016); if you want a floating R/C boat, it is better to use epoxy resin (Art. 70515) & polyurethane varnish.

Fig. 4 - Start the planking with white 1,5x6x1025 strips, two pieces each side to avoid twisting problems.

New procedure.

THE PLANKING IN HARD BALSA.

After the project and the production of the kit of the Mincio boat, made with balsa planking, we have seen how nice balsa wood is for the construction of the hull planking, in the period ship. The strips of balsa are very flexible and elastic in respect of hard wood and can be bent, dry without the help of a planking machine or a strip bender. It is possible to hammer nails, pins and staple with no cracks, mainly at the end of the wood. The first sanding is easier and then, after a coat of 30% diluted aliphatic glue in water, the hull beco-mes strong and light and also easy to scrape and sand, to finish the surface ready for painting or for the second planking. The construction is more stable in the time, with no cracks for wood shrinking. (This kit contains both plankings, lime and balsa).

Taper each strip for a length of 160 mm one end & glue it in position clamping with nails not hammered in full. After the first 9 strips each side, place the tenth at 40 mm from the keel & then cover the rest of the hull; plank the stern with pieces of the same strips, clamping with pins as shown on the drawing. When dry remove all nails & pins & scrape all the surface. Now sand the hull & start with the second planking, 1x6x1025 mm strips.

Fig. 5 - When the second planking is completed, remove all nails & pins; with a hard brush coat P.V.A. glue on all of the hull & remove the excess with a wet cloth. When dry scrape the surface & sand it with care. Drill the existing holes with 6 mm shell bit on the part. 14 & insert the brass bushing (6x45 mm) for the rudder axles. Cement the dummy keel with the 5x8x800 mm strip now varnish with sanding sealer (Art. 1020) & when dry, sand with care.

Fig. 6 - The deck. Sand with care the bottom of the deck N. 17 & glue it on the hull, clamping with nails. Take care to fit the deck in the proper position; glue the stern transom inside the part N. 13. Now plank the deck N. 17 with 1x6 mm strips. Place the glue on the plywood only & press the strip for few seconds. Save extra parts of the strips for further use later. After the planking, sand all the surface & both the inside & outside edges of the perimeter & openings. Cover the outer edge with 1x6 mm strip. Scrape & sand the planking & varnish with sanding sealer.

Fig. 7 - The cradle. Glue the feet & assemble the base N. 18 with the frame N. 19 & cover the edges with 1x6 mm strip. Paint the base red for more realistic effect of the hull on the support.

Fig. 8 - Engine room. Assemble the parts N. 20-21-22, not glueing the transom N. 22, to be removed later.

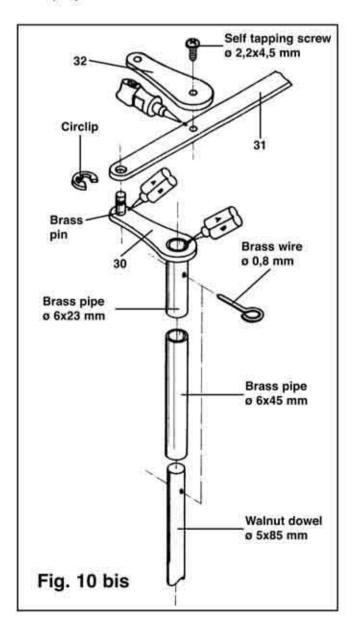
Plank the parts with 1x6 mm strips & cut 45° the edge with a plane on both siedes, as shown on the plan. Now smooth the outer edges with sand-paper & the inside of the door & window openings.

Sand all the planking & coat twice with sanding sealer before painting the complete set with white mat dope. Frame the windows with 1x4 mm strips; the framing of the doors is 1 mm protruding to make the inside support of the panels. Place the brass netting inside the wall with a drop of epoxy each corners.

Fig. 9 - Storage. Assemble the parts N. 23-24-25, the covering surface & varnish; now plank the inside of the doors N. 26-27-28 & smooth & varnish. Place the handles made with eye-lets & rings as shown on the plan. When all is ready, apply the steps in position with instant glue.

Fig. 10 - Rudder section, 1:1 scale. Cut two slots (2x20 mm) into the dowels (Ø 5x85 mm) & insert the rudder blades N. 29. Make the caps with brass tubing (6x28 mm) & fix the horns N. 30 with epoxy. Insert the rudder in the proper position & place the cap with the arm on top; after that, drill a 1 mm hole to insert a brass pin cut from 0,8 mm wire. Glue the two pins into the arm & assemble the connecting bar N. 31, blocking it with two circlips; the arm will be connected with servo eventually, in case of radio control use.

Fig. 10 bis - Cut two slots (2x20 mm) into the 5x85 mm dowels, to insert the rudder blade N. 29. Make two caps with brass pipe (6x23 mm) & fix the arms N. 30 with epoxy. Fit the dowel with the rudder blade into the



guide, brass tubing (6x45 mm) epoxy to the hull; insert the cup with the arm & drill a 0,80 mm hole to fit the pin, made from 0,80 mm brass wire. Glue the two brass pins with epoxy into the lever N. 30 & connect the bar N. 31, secured with two circlips. Place the part N. 32 fixed with aliphatic glue & a 2,2x4,5 mm self tapping screw.

Fig. 11 - Horse box. Draw the framing line of the box on a piece of plywood; fit some nails without head on the sides of the 2x4 mm strips. Glue the transoms (1x4 mm) with a drop of instant resin & use a 2x4 mm strip to clamp the set. Repeat the construction 5 times, varnish, sand & glue them in position on the front of the engine room as indicated on the plan.

Fig. 12 - First deck. Put the deck N. 33 in the correct position against the engine room. Draw the perimeter of the lower structures with a soft pencil. After that, place the deck upside down on the table & make the dummy stiffening net with 2x4 mm strips; put the reinforcements made with 4x4 mm strip between the two parts. The distance between the strips is 25 mm; attention: do not close the slots for the side lower pillars. Plank the upper level with 1x6 mm strips, shape the edges & place the first covering strip (1x6 mm) & plank the ladder opening edge. When dry, sand the work & apply the second 1x4 mm strip, on the outer edge of lower planks. The drawing shows how to complete the work. When ready, varnish & put in place.

Fig. 13 - First deck cabins. Assemble the parts N. 34-35-36-37 & plank them as for the other parts with the same 1x6 mm strips. Paint the assembly mat white & frame all the openings with 1x4 mm strip, 1 mm protruding from the outer wall.

Fig. 14 - Doors & windows. Sand the plywood with laser cut doors N. 38-39 & windows N. 40 with thin grain paper. Remove the parts with a balsa knife; cover the lower part with 1x4 mm strips, leaving a small tooth to put the clear plastic. Sand the door, varnish & then glue the glass with contact glue & not instant glue. Now fix the door in position.

Fig. 15 - Dummy handles. Drill a 0,8 mm hole in the middle of the pillars, put the ring on the nail & hammer into the door & cut off the excess of nail.

Fig. 16 - Outer doors. Repeat the operation for the doors N. 41; to make the door grating, use 0,5x3 mm wood, cut in pieces of 70-80 mm & glued one on the other, protruding up to 1 mm. Make the assembly on a piece of nylon foil to avoid the problem of the glue sticking the assembly on to the table; when dry, cut 6 mm bands with a fret-saw & glue them on the doors. Varnish the assembly & glue it on the opening. Glue the cabin assembly on the deck, varnish in hand the 0,5x3 mm strips & glue them as a lower framing.

Fig. 17 - Second deck. Plank the full deck N. 42; after that, cut all slots with a fret-saw & open the chimney holes. Now place the deck on the hull correctly aligned on the bow with the lower deck. Now apply the outer framing. Fig. 18 - Second deck cabin. Assemble the cabin and put it in position: take care that the windows N. 46-47 are placed on the stern.

Fig. 19 - Third deck. Work as before & put the deck N. 48 in line with the lower deck at the stern. Cut the side slots as made before.

Fig. 20 - Cabin ladders. The sketch shows how to

make the job. Place the sides N. 49 on a piece of plywood as a base, cut the head of some nails, & use them as support of the sides. Sand a 1x6 mm strip & after cutting all the steps, glue them in the middle of the sides.

Fig. 21 - Stern room ladder. Make it with the sides N. 50 varnish the set & fix it together with instant glue.

Fig. 22 - Second deck sun screen. Plank the piece N. 51 with the 1x6 mm strip, cut the slots & frame the outer edge. Varnish & glue the set on the deck. Sand & varnish the 3x3 mm pillars & glue them in position.

Fig. 23 - Cabin-roof. Assemble the parts N. 52-53-54 & paint the assembly white. Plank the roof with 1,5x5 mm strips & after sanding, varnish with care. Glue the brass netting on the openings. Do not glue the cabin on the deck, but leave it movable to inspect the inside.

Fig. 24 - Main ladder. Glue both sides N. 55-56, one right & one left. The platform N. 57 must be fixed in

Fig. 24 - Main ladder. Glue both sides N. 55-56, one right & one left. The platform N. 57 must be fixed in line with the upper pillar, to be covered with 1x6 mm strips. Build the steps with the same 1x6 mm strip & then varnish & put on the red band.

Fig. 25 - Second ladder. Assemble the sides N. 57-58 to have two right & two left. Plank the sides on the edges with 0,5x3 mm strips & at last place the red carpet. Fig. 26 - Third ladder. Build the set using the part N. 59-60 without the red band.

Fig. 27-28 - The 1:1 scale drawings show the position of the ladders & how to build the bannisters with the wooden stanchions & the 1,5x5 mm hand-rails. After that, glue the brass balls with instant resin.

Fig. 29 - Deck pillars. Remove the pillars N. 61 from laser cut board & cover the outer face with 1x4 mm strip; sand & varnish with care.

Fig. 30 - The pillars are different in length, check on the plan how to calculate the size of each pillar.

Fig. 31 - Upper deck pillars. Prepare all pillars in exact length & varnish. The third deck pillars are protruding 18 mm & the second deck pillars, 22 mm.

Attention: the First & second deck, follow the same line of the main deck N. 17.

Fig. 32 - Crew ladders. The right & left pillars are ready to use in the kit: cut the steps & follow the sketch for the assembly with instant glue.

Fig. 33 - Cut eighteen stanchions of 18 mm, drill & apply a nail without head as a tenon. Mark the position of the pillars & drill a 0,8 mm hole for the tenon. Glue the pillars & make the hand-rails as shown on the drawings.

Fig. 34 - The bannisters. Before you remove the bannisters N. 62-63 from the laser cut boards, sand the surface & spray varnish. Varnish the 1,5x5 mm strip to make the hand-rail & glue the parts in position.

Fig. 35 - Adapt the bannisters inside the pillars & glue them with istant cement at a distance of 1,5 mm from the deck, using some strips as a spacer. The bannisters N. 62 are placed on the first & second deck; the N. 63 are for the third deck. The drawing shows the decoration of the pillar N. 63, painted white, & glued in position. Fig. 36 - The frames N. 67-68 are the masks to place the curved bannisters N. 65-66; the masks will remain

in position untill the hardening of the glue.

Fig. 37 - Stern angled bannisters. Use the hand-rail N.
69 & cut the bannister in three parts as shown on the drawing.

Fig. 38 - Bow water protection. Wet the two parts N.
70 to soften the wood to be bent. Draw the centre of

the parts & glue both pieces with white glue, clamping in the middle with a nail; use some tape to clamp the ends to the mask. When dry, remove the protection from the mask & glue it in place on the deck.

Fig. 39 - Rudder cabin. Sand the part N. 72 & draw the dummy planking with a soft pencil. Assemble all the parts N. 73-74-75 & finish as you did with the other cabin.

Fig. 40 - Windows. Varnish the windows N. 76-77-78, glue in position the clear plastic & glue the set inside the cabins.

Fig. 41 - Varnish the rudder support (4x18x18 wood), drill a hole for the rudder pin & glue the piece in place. Make the compass base with a wooden dowel (8x8 mm).

Fig. 42 - Rudder cabin-roof. Glue the two parts N. 80 on the piece N. 79; make sure the flat perimeter is 20 mm. Plank the cup with 1x4 mm strips, starting from the longer sides; sand the ends in line with parts N. 80 & finish the planking on the shorter sides. When dry smooth the sides with a file; put a piece of 1,5x5 mm strip on top. After the covering of the base, sand & varnish. Place the mouldings N. 81 around the roof & paint them white.

Fig. 43 - Rear view of the cabin. Glue the cabin in place & glue two 0,5x3 mm strips between cabin & roof. Fig. 44 - To obtain right rods from brass wire clamp one end in a vice & pull the other end with a pair of plyers untill it becomes straight.

Fig. 45 - Wind vane. Cut a slot in the first ball of the stanchion with a metal saw: insert a piece of brass wire into the second ball hole & hammer the ends to make them flat. Now cut with a pair of scissors to form an arrow. Glue the top into the slot of the stanchion.

Fig. 46 - Cut the chimney from 6 mm dowel & make the caps from 8 mm dowel. After that, paint them black & fix the chimneys on the roof. Glue the roof in the proper place & drill the hole to fix the wind vane. Apply the ladder as shown on the drawings.

Fig. 47 - Wheel set section. Glue & nail the wheel supports on the sides of the deck N. 17, on the outer edge. Insert the four wheel patterns N. 83 into the axle, put a washer, a bushing & a second washer.

Put the set on the support & check the free rotation. Cut the twelve blades from 3x15 mm strip. Sand with care & glue the first one clamping with cloth pegs; glue the second blade in the opposite position, checking the correct rotation of the wheel set. Proceed in the same way with the other ten blades.

Fig. 48 - Con-rod-wheel section. Epoxy the pin & the con-rod in place; build the fixing bridges from 5 mm brass strip. Drill the supports to place the screws.

Fig. 49 - Now to fit the motor & the eventual R/Control set. The base N. 87 is the plate where you can put the motor, the radio & all necessary parts. The conrods are to be reinforced with two 1x3 mm strips glued on each side. The stern transom N. 86 is to be planked with strips & painted white. Glue inside two inclined stops to block the transom.

Fig. 50 - Put the decals on the parts N. 88-89 & place the others, name & decorations on the cabin walls.

Fig. 51 - Prepare the 1x4 mm strips well sanded & painted white. Fit the strips in the proper slots & secure them with a drop of instant glue. Place the four eyelets & the chain on the side openings. Put the decorations on the two pillars N. 64 where the opening is.

Fig. 52 - Drill 1 mm hole for the stanchions. Insert the wire, you have made straight, & cut to size, clamping it with a drop of instant glue.

Fig. 53 - Chimneys. Cover the big pipes with 0,5x3x50 mm strips, starting 5 mm from the bottom.

Drill the 2 mm holes for the tubings N. 90 & drill the 0,8 mm holes for the eye-lets. After that, sand & varnish the wood & paint the rest of the pipe with mat black; when dry mark the position of the brass rings & of the dummy cap, with a soft pencil. Remove eventual the inside burrs with a blade & fit the brass rings, securing them with instant glue. Do the same for the small chimneys; the planking is 24 mm only, starting from the bottom. Close the small hole with a piece of wood, make a wooden tenon, & glue the chimney in position. Fig. 54 - Bow spars. Taper a 6 mm dowel for 150 mm down to 2,5 mm diameter. Cover the bottom with 0,5x3x30 mm strips. Fit the eye-lets & the block cut from a 3x8 mm strip. Glue two brass balls on the upper ends; fix the spars on the deck with a drop of glue & clamp with nails on both decks. Taper the dowel (4x245 mm) to make the yards & glue at the ends the caps made from belaying-pins; glue the cheeks N. 91 using a nail as a pin.

Fig. 55 - Flag pole. It is made from 6x400 mm dowel, well tapered & with a brass ball on the top. Cover the base with 0,5x3x30 mm strips, at 5 mm from the end.

Fig. 56 - Light support. Insert the part N. 92 into the mast at 180 mm from the bottom & glue. Assemble the light making the support from 5 mm brass strip & make the pins cutting two nails to size (see plan). Drill a 6 mm hole on bow & glue the mast. Drill a small hole on top for the flag rope.

Fig. 57 - Boarding bridges. Cover the two parts N. 93 as indicated on the sketch & cut the two heads from 4x4 mm planks. Fit the side eye-lets & the eye-lets to fast the lifting chains. Make the parrals taking sizes from the plan & use a 2 mm dowel to make the transverse support with eye-lets & chains.

Fig. 58 - Chimney parts. Assemble the parts N. 94-95 & plank the curved surface with 0,5x3 mm strips; smooth, varnish & fit in position with a drop of glue.

Fig. 59 - Life boats. Assemble the boats following the plan using 0,5x3 mm strips, tapered on bow. Smooth, varnish & place up down on the 4x4x25 mm planks.

Fig. 60 - Boat parrals. The drawing shows how to do the job; glue the hinges on the lower braces only & fit a nail without head as a tenon. Drill the holes on the third deck & glue the parrals.

Fig. 61 - Bow windlass. Adapt to size the six wings & glue them in position. Insert the brass rods into the holes, varnish & place it on bow.

Fig. 62 - Bell. Flatten the top ball of the bell with a file & drill a 0,8 mm hole, to fix the brass wire as support following the plan. Assemble the bell at a distance of 15 mm between the sides.

Fig. 63 - Cable tensioner for masts. Drill 4 mm holes to insert the four masts, well sanded. Drill the rope hole on top & fix the rigging on an eye-let on the deck. The positions of all rings are indicated on the plan.

Fig. 64 - Wooden crates. An assortiment of crates are supplied in the kit, parts N. 96-97-98, planked with maple 0,5x3 mm strips. Barrels & crates are randomly located on the lower deck.

LISTA DEI MATERIALI Descrizione	MATERIAL LIST Description	MATERIALLISTE Beschreibung	LISTE DI MATÉRIEL Description	MATERIALENLIJST Beschrijving	mm.	Quan. Anz. Aan.	Disegno N. Ident N. Nr.		
Tavola N. 1	Board N. 1	Platte Nr. 1	Contreplaqué N. 1	Plaat N. 1	4x200x750	1	38-61		
Tavola N. 2	Board N. 2	Platte Nr. 2	Contreplaqué N. 2	Plaat N. 2	4x242x1030	i i	17-24-25-45-86-87		
Tavola N. 3	Board N. 3	Platte Nr. 3	Contreplaqué N. 3	Plaat N. 3	5x215x890		1-2-3-4-11-14-15-16		
Tavola N. 4	Board N. 4	Platte Nr. 4	Contreplaqué N. 4	Plaat N. 4	4x242x730	2	37-48-52-53-54-72-93		
						- 2			
Tavola N. 5	Board N. 5	Platte Nr. 5	Contreplaqué N. 5	Plaat N. 5	4x205x675	2	34-44-75		
Tavola N. 6	Board N. 6	Platte Nr. 6	Contreplaqué N. 6	Plaat N. 6	5x215x520	1	12-18-19-82		
Tavola N. 7	Board N. 7	Platte Nr. 7	Contreplaque N. 7	Plaat N. 7	5x215x470	3.	5-6-7-8-9-10-13		
Tavola N. 8	Board N. 8	Platte Nr. 8	Contreplaque N. 8	Plaat N. 8	2x100x280	1	29-30-31-32-57-84-85-92		
Tavola N. 9	Board N. 9	Platte Nr. 9	Contreplaque N. 9	Plaat N. 9	4x242x775	1	21-22-33-35-36		
Tavola N. 10	Board N. 10	Platte Nr. 10	Contreplaqué N. 10	Plaat N. 10	1,5x242x370	*	38-41-70		
Tavola N. 11	Board N. 11	Platte Nr. 11	Contreplaqué N. 11	Plaat N. 11	1,5x242x360	1	26-27-28-39-40-46-47-65- 66-69-76-77-78-80-94-95		
Totals N 40	Decedal 40	Diene Ne 10	Control N 10	Direct N. 10	1.040.075				
Tavola N. 12	Board N. 12	Platte Nr. 12	Contreplaqué N. 12	Plaat N. 12	1x242x375	1	62		
Tavola N. 13	Board N. 13	Platte Nr. 13	Contreplaqué N. 13	Plaat N. 13	4x200x410	2	20-51-67-68-71		
Tavola N. 14	Board N. 14	Platte Nr. 14	Contreplaqué N. 14	Plaat N. 14	4x240x620	3	23-43-73		
Tavola N. 15	Board N. 15	Platte Nr. 15	Contreplaqué N. 15	Plaat N. 15	1x205x375	1	63-64-81-90-91		
Tavola N. 16	Board N. 16	Platte Nr. 16	Contreplaqué N. 16	Plaat N. 16	4x242x810	1	42-74-79		
Tavola N. 17	Board N. 17	Platte Nr. 17	Contreplaque N. 17	Plaat N. 17	1,5x242x335	1.	49-50-55-56-57-58-59-60-88-89-96-97-98 Scialuppa-Lifeboat-Rettungs boot- Chaloupe-Reddingsboot		
Listelli	Strips	Leisten	Listeaux	Strips	0,5x3x450	30			
Listelli	Strips	Leisten	Listeaux	Strips	1x3x500	4	2		
Listelli	Strips	Leisten	Listeaux	Strips	1x4x1000	25			
Listelli	Strips	Leisten	Listeaux	Strips	1x6x1025	250	æ		
Listelli	Strips	Leisten	Listeaux	Strips	1,5x5x600	25	2.		
Listelli	Strips	Leisten	Listeaux	Strips	2x4x700	15) <u>5</u>		
Listelli	Strips	Leisten	Listeaux	Strips	3x3x600	10	2		
Listelli	Strips	Leisten	Listeaux	Strips	3x15x450	4			
Listelli	Strips	Leisten	Listeaux	Strips	4x4x500	3	27		
Listello	Strip	Leiste	Listeau	Strip	5x8x800	1	2		
Listelli	Strips	Leisten	Listeaux	Strips	1,5x6x1025	50			
Listelli	Strips	Leisten	Listeaux	Strips	0,5x3x500	15	3		
Tondini noce	Walnut dowels	Nußbaum-Rundstäben	Rands en noyer	Rondhout in notelaar	o 4x500	4	5		
Tondino noce	Wainut dowel	Nußbaum-Rundstäbe	Rond en noyer	Rondhout in notelaar	o 6x400	1	2		
Tondino noce	Walnut dowel	Nußbaum-Rundstäbe	Rond en noyer	Rondhout in notelaar	ø 6x700	.1	-		
Tubi alluminio	Aluminium tubings	Aluminiumrohr	Tubes d'aluminium	Aluminiumbuis	ø 20x300	2	Ċ.		
Tubi alluminio	Aluminium tubings	Aluminiumrohr	Tubes d'aluminium	Aluminiumbuis	o 10x150	2	5		
Tuba nylon	Nylon tubing	Nylonrohr	Tube nylon	Plastiekbuis	o 2x150	1	-		
Tubi ottone	Brass tubings	Messingrohr	Tubes en laiton	Koperbuis	o 1,8x175	2			
Tubi ottone	Brass tubings	Messingrohr	Tubes en laiton	Koperbuis	o 6x23	2	2		
Tubi ottone	Brass tubings	Messingrohr	Tubes en laiton	Koperbuis	o 6x45	2	*		
Perno ottone	Brass pin	Welle, Messing	Axe en laiton	Messingpinnen	o 6x146	2			
Tondino noce Tondino noce	Walnut dowel	Nußbaum-Rundstäbe Nußbaum-Rundstäbe	Rond en nover	Rondhout in notelaar Rondhout in notelaar	o 2x100	4			
	Walnut dowel		Rond en noyer Vis autotaraudeuse	Draadtrekkende schroef	o 5x200	2			
Viti autofilettanti	Self tapping screws Double stanchions	Blechschraube	Batayole doubles	Dubbele stanchions	o 2,2x4,5 15	2 45	-		
Colonnine doppie noce Ruota timone bosso	Box wood wheel	Doppelsäulen Ruderad, Buchsbaum	Roue en bois	Houten stuurwiel	0 40	1	-		
riduid limone 00550	DOX WOOD WINESI	nouerau, ouchsoaum	House oil ools	TAUGUT STUDING	U 40	. C	IX.		

LISTA DEI MATERIALI	MATERIAL LIST	MATERIALLISTE	LISTE DI MATÉRIEL	MATERIALENLIJST	mm.	Quan, Anz.	Disegno N.
Descrizione	Description	Beschreibung	Description	Beschrijving		Aan.	Ident N. Nr.
Blocco noce	Walnut block	Block, Nußbaum	Bloc en noyer	Walnoten blok	4x18x18	1	-
rgano bosso	Box wood capstan	Gangspill, Buchsbaum	Cabestan en bois	Hout katten davits	20	1	
pallette argano	Capstan sides	Spaken fur Spill	Flanc de cabestan	Kaapstaander zijden		6	
erni ottone	Brass pins	Wellen, Messing	Axes en laiton	Messingpinnen	ø 1,5x11	6	
Canapa	Rope	Takelgarn	Cordage	Touw	ø 0,50	20 mt	100
Chiodini in ottone	Brass nails	Drahstifte, Messing	Clous en laiton	Nagels		200	
Occhielli	Eye-lets	Augbolzen	Piton	Oogvijzen	1,8x8	60	
iti autofilettanti TC	Self tapping screws	Blechschraube	Vis autotaraudeuse	Draadtrekkende schroef	ø 2,2x13	4	0+3
erniere timone	Rudder hinges	Ruderscharnieren	Chamières de gouvernail	Roerscharnieren	2x10	2	
andelieri Art. 31810	Hand rall Nr. 31810	Relingstützen Best-Nr. 31810	시발 회사 사이를 즐겁게 하지만 하고요? 프랑테스를 맞아 하지 않아 하는 사람들이 없다.	Handreling nr. 31810		9	
alletto ottone	Brass wingnut	Messing Hahn	Ecrou à allettes	Koperen vleugelmoer	-	1	
asamenti ottone	Brass washers	Stahlscheibe	Rondelle laiton	Koperen rondellen	0.3x6x10	4	+
ronzine ottone	Brass bearings	Messing, Bronzelager	Bague laiton	Koperen lagers	6x10x5	2	
nelli	Rings	Messingringe	Anneaux	Ringen	03	8	
erchi fumaiolo ottone	Chimney rings brass	Schornstein Ring	Anneau de cheminée en laiton	Schoorsteeringen koper	ø 22	10	
appello fumaiolo grande	Wide chimney cap	Schornsteinkappe, Groß	Grand couvercle de cheminée	Brede schoorsteenkappen	ø 30x13	2	
appello fumaiolo piccolo	Small chimney cap	Schomsteinkappe, Klein	Petit couvercle de cheminée	Smalle schoorsteenkappen	o 16x6.5	2	-
aviglie noce	Walnut belaying-pin	Koffienägel, Nußbaum	Cabillots en nover	Walnoten belegginnen	10	11	2
Iontanti scala DX	Right ladder sides	Treppenholme rechts	Echelles droites	Rechter ladder zijden	2.5x5x95	5	-
Iontanti scala SX	Left ladder sides	Treppenholme links	Echelles gauches	Linker ladder zijden	2.5x5x95	5	-
atena Art. 32210	Chain Nr. 32210	Ankerketten Best-Nr. 32210	Chaine N. 32210	Ketting nr. 32210	600	1	
nelli	Rings	Messingringe	Anneaux	Ringen	02	70	- 5
ampana Art. 32400	Bell Nr. 32400	Schiffsglocke Best-Nr. 32400		Bel nr. 32400	0.2	1	
upporti	Supports	Halterung	Support	Steunen	2x14x19	2	
uota	Wheel	Rad	Roue	Wiel	0 11	1	
aro ottone	Brass light	Messing, Leuchte	Lumière laiton	Koper licht	p 13x11.5	1	-
erchio faro	Light ring	Ring Leuchte	Anneau de lumière	Licht ring	ø 13x3.5	1	2
hiodi ottone	Brass nails	Drahstifte, Messing	Clous en laiton	Nagels	1,5x20	2	22
etrino	Wind screen	Glas	Vitre	Windscherm	0 12	1	
upporto faro	Light support	Leuchte-Träger	Support de lumière	Lichtsteun	8x8	1	-
fere ottone	Brass balls	Messing, Kugel	Rotule laiton	Koperen ballen	03	82	0
eger albero	Shaft circlip	Sicherungsscheibe	Axe circlips	Circlips	ø 3	6	
erni bielle	Conrod pin	Pleuelstangewellen	Axe de commandes	Pin	g 3x6.5	6	-
ussola	Compass	Kompass	Compas	Kompas	0 000,0	1	-
ondino noce	Walnut dowel	Nußbaum-Rundstäbe	Rond en nover	Rondhout in notelaar	p 8x8		3
ozzelli noce - 2 fori	Walnut blocks - 2 eye	Nußbaum blöcke, doppelt	Poulies double en nover	Walnoten katrollen - 2 ogig	5/2	8	~
elluloide verde	Green clear sheet	Zelluloid	Plastique transparent	Transparant groene folie van	250x300	1	-
oglio decals	Decals sheet	Abziehbild	Planche décalque	Decalblad	200,000	1	2
omici basamento DX	Right base mouldings	R.Einfassungen des Gestells		Rechtse voetstuk vormen	ŝ	4	5
ornici basamento SX	Left base mouldings	 A supplied to the control of the contr	Moulage base gauche	Linker voetstuk vormen		4	~
otti noce	Walnut barrels	Wasserfaß, Nußbaum	Tonneau en nover	Notehouten tonnen	g 20x22	6	
otti noce andiere	Control of the second second	TO DESCRIPTION OF THE AMERICAN PROPERTY OF THE	Pavillon	CONTROL POR CONTROL OF THE PARTY OF THE PART	30x55	2	- 5
	Flags	Flagg	ALCONOMICS AND ALCONO	Vlaggen Konst not	20 Carrier	-	-
lete ottone	Brass net	Messingnetz	Filet laiton	Koper net	23x750	1	
ilo ottone	Brass wire	Messingdräht	Fil de laiton	Koper draad	ø 0,8x1000	1	
lastro ottone	Brass sheet	Messingband, hart	Feuille laiton	Koperplaat	0,3x5x150	10	3
avole disegno	Construction plans	Baupläne	Planches de construction	Bouwplannen	-	10	-
ibretto istruzioni	Booklet with instructions	Anleitungen	Livret pour les instructions	Handleiding	*	1	*